

## DISTORTION COMPENSATOR

This invention is intended to improve the efficiency of distortion compensation in a distortion compensator that compensates for distortion arising in an amplifier that amplifies a signal. Signal level detection means 1 detects the level of a signal amplified by the amplifier 5. Distortion compensation execution means 2-4 executes distortion compensation with respect to the signal amplified by the amplifier 5 by a mode of distortion compensation corresponding to the signal level detected by the signal level detection means based on a correspondence between signal levels and distortion compensation control values that determines the mode of distortion compensation. Distortion compensation control value correspondence update means 6 updates the correspondence between signal levels and distortion compensation control values used in the execution of distortion compensation by the distortion compensation execution means based on the signal amplified by the amplifier. Distortion compensation control value correspondence updating mode parameter value control means 6 controls the values of stipulated parameters regarding the mode of updating by the distortion compensation control value correspondence update means.